



**TIER II RESIDENTIAL PROPERTY
REMOVAL ACTION FINAL REPORT ADDENDUM
SOUTH PLAINFIELD, NEW JERSEY**

Prepared for

Foley, Hoag & Eliot, LLP
Michael P. Last, Esq. c/o Rackemann, Sawyer & Brewster
Boston, Massachusetts

for submission to

USEPA Region II

Prepared by

ENVIRON International Corporation
Princeton, New Jersey

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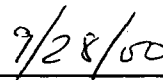
Plate 15: As-Built Replacement Landscape Plan – Property CC

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Appendix F: F.2.1 Non-Hazardous Waste Manifests

CERTIFICATION

I certify that the information contained in and accompanying this certification is true, accurate, and complete.



Michael P. Scott
Project Coordinator
ENVIRON

Date

1.0 INTRODUCTION

The United States Environmental Protection Agency (USEPA) identified polychlorinated biphenyls (PCBs) in soils at seven residential properties (Properties) in South Plainfield, Middlesex County, New Jersey. Five of these Properties are located generally west of the Hamilton Industrial Park, which was placed on the National Priorities List as a federal Superfund site in July 1998 (see Figure 1-1). Two of the Properties are located north of the Hamilton Industrial Park. The Properties were designated by USEPA as Properties U, W, X, AA, BB, CC and DD, as shown in Figure 1-2. Removal action activities and site restoration of the Properties were mandated under an Administrative Order on Consent (AOC) issued on February 23, 1999 by USEPA under CERCLA (Index Number II-CERCLA-99-2006).

ENVIRON International Corporation (ENVIRON) was retained by Cornell Dubilier Electronics, Inc. (CDE) and Dana Corporation (Dana) to manage the removal action and restoration of these seven Properties pursuant to the AOC. Removal action and restoration activities were implemented by Integrated Technical Services, Inc. (ITS) of Winslow, New Jersey.

In accordance with the requirements specified in the AOC, pre-remediation soil sampling, surveying and excavation/restoration plan development was conducted during the period of March through September 1999. An assessment of the pre-excavation verification soil sampling results, as well as characterization data for soils not removed from the Properties determined that the final limits of excavation achieved the AOC-specified cleanup goal. Soil excavation and off-site disposal activities, with the exception of the disposal of one drum containing debris material, were conducted during the period of September through December 1999. All excavation areas were then backfilled, with subsequent restoration activities largely completed as of December 22, 1999 (due to the inability to obtain certain plant material toward the end of the 1999 planting season and seasonal weather constraints, certain restoration activities were postponed until after March 15, 2000). Work completed through December 1999 was documented in the *Tier II*

Residential Property Removal Action Final Report ("Final Report") submitted to USEPA on January 14, 2000.

In addition to documenting work completed under the AOC, the Final Report specified that certain removal action activities, including the disposal of one drum of debris and completion of restoration activities on three properties were to be completed after December 1999. This Final Report Addendum summarizes the actions taken to complete these remaining removal action requirements. In particular, this report documents the following work which was completed by CDE and Dana in compliance with the AOC during the period of January through August 2000:

- Disposal of one remaining drum containing debris removed from Tier II Properties;
- Restoring disturbed areas on Properties X, BB and CC to pre-removal action conditions;
and
- Coordinating activities with residents and the community.

Based on the documentation provided in the Final Report and this Final Report Addendum, CDE and Dana have completed all work necessary to satisfy the requirements of the AOC and to meet the AOC-specified cleanup goal on the seven Properties. No further work on the seven Properties is warranted under the AOC.

2.0 SYNOPSIS OF WORK PERFORMED

2.1 Overview

As specified in the AOC, field work was to be completed within 120 calendar days of the receipt of Work Plan approval. Thereafter, the Final Report was to be completed within thirty calendar days of completing the "work" and receiving validated data. As a result of several unexpected delays in the schedule, ENVIRON requested modifications to the schedule to reflect the additional time incurred to address these issues.

- Due to the unavailability of certain plant species and seasonal weather constraints, certain Property restoration work was postponed until after March 15, 2000. As described in Section 2.3 of the Final Report, the postponed work included the following:
 - Property X: Rototill sand into unsodded areas; and rake, roll and sod these areas.
 - Property BB: Replace the Kwanzan Cherry tree.
 - Property CC: Plant one Privet hedge;
Plant the Montmorency Cherry tree;
Plant Japanese Barberry hedges; and
Provide the Property owner with a 1-ft Lemoine Deutzia shrub.

USEPA reviewed the scope of these restoration activities during a site visit on April 4, 2000.

- As described in Section 2.3 of the Final Report, subsurface debris was encountered during the course of excavation activities on three of the Tier II Properties. This debris

included broken concrete, recycled asphalt, broken pipes, wire, and garbage. During final load-out activities, a representative sampling of debris (including broken concrete slabs, recycled asphalt, broken pipes and one rusted 55-gallon drum lid) was placed in a 55-gallon drum. The pick-up and disposal of this drum of debris was scheduled for February 2000.

2.2 Review of Property Specific Activities

2.2.1 Property X

As documented in Section 2.3.3.3 of the Final Report, after completion of backfilling of the excavation areas to original grade on Property X, rain water from several heavy rain events accumulated in the recently-placed topsoil area, particularly in the central and northwesterly portions of the Property. On November 3, 1999, sod was placed over approximately one-half of the Property. Wet soil conditions on the remaining one-half of the Property prevented sod placement on those areas. Watering of the newly-placed sod also contributed to the wet conditions. As a result of these wet conditions, restoration of this portion of the lawn could not be completed within the planting season specified on the landscape restoration plan, and, therefore, was postponed until after March 15, 2000. With the exception of the lawn area remaining to be completed, restoration activities were conducted between October 4 and November 3, 1999.

The remaining restoration work was completed during the period of May 3 through 11, 2000. As part of this work, well-graded sand was rototilled into the topsoil in the unsodded areas (to improve drainage conditions); then, the tilled area was graded and sodded. There have been no concerns raised by the Property owner regarding the drainage of this area since completion of this work.

2.2.2 Property BB

As described in Section 2.3.5.3 of the Final Report, restoration activities were conducted on Property BB between October 4 and November 13, 1999. Based on an examination of the plantings by Maser Consulting, it was determined that the quality of replacement Kwanzan

cherry tree was below the specified quality grade because of scaring noted on the tree trunk. Consequently, this tree was to be removed and replaced with an acceptable Kwanzan cherry tree after March 15, 2000.

Based on discussions with USEPA and the Property owner on April 4, 2000, it was agreed that rather than replacing the cherry tree, the scar on the tree trunk would be sealed and wrapped. In addition, the survival of the tree would be guaranteed for one additional year past the agreed on one year warranty period. The work on this tree was completed on May 11, 2000. There have been no concerns raised by the Property owner regarding the cherry tree since completion of this work.

2.2.3 Property CC

As described in Section 2.3.6.3 of the Final Report, restoration activities were conducted on Property CC between October 15 and November 13, 1999. However, as a result of the time of year and the uncommon nature of the species required to complete the restoration work, three plantings (the Montmorency sour cherry tree, Japanese Barberry hedges, and one remaining Privet hedge) were not installed. These remaining plantings, in addition to a 1-ft Lemoine Deutzia shrub requested by the Property owner, were to be obtained and planted after March 15, 2000. In addition, based on discussions with the Property owner, if the Japanese Barberry hedges were still not available in the spring, then these hedges would be substituted with equivalent plantings.

The remaining restoration activities were completed during the period of May 3 through 11, 2000 and August 8 through 22, 2000. Because a source for the Japanese Barberry hedges could not be located, the Property owner agreed that the restoration plan would be amended to substitute Japanese Holly for these hedges. The modified restoration plan is provided on Plate 15.

3.0 SUMMARY OF WORK PLAN MODIFICATIONS

3.1 General Modifications to the Work Plan

During the course of the removal activities, modifications were made to the Work Plan to reflect actual field conditions, to address issues identified by USEPA, and to address requests from Property owners. These modifications related primarily to restoration plans and scheduling.

- **Property-Specific Restoration Plan Modifications**

Modifications to restoration plans were completed on a Property-specific basis in consultation with USEPA and/or the respective Property owner. A description of the work completed on each Property, including the requested modifications and additional work is provided in Section 2.2.

3.2 Schedule Modifications

No additional schedule modifications were requested during the period of January through August 2000.

4.0 DISPOSAL ACTIVITIES

4.1 Scope of Disposal Activities

The remaining drum containing the debris that was encountered on several of the Properties was removed on February 17, 2000 by S&W Waste, Inc. for off-site disposal at the G.R.O.W.S. Landfill.

4.2 Disposal Option Selection

As discussed in the Final Report, CDE and Dana evaluated the use of several non-hazardous landfills for the disposal of excavated soils, and notified USEPA on September 13, 1999 of the facilities selected for the treatment and/or disposal of excavated soils. A summary of the waste characterization sample data requested by the selected facilities prior to acceptance of the waste was provided in Appendix F.1 of the Final Report.

4.3 Disposal Notifications

In accordance with the AOC, CDE and Dana notified USEPA on September 13, 1999 of its selection of the facilities to receive soils from the seven Properties. In addition, as required by the AOC, CDE and Dana notified the Pennsylvania Department of Environmental Protection (PADEP) on September 13, 1999 and the New Jersey Department of Environmental Protection (NJDEP) on December 15, 1999 of: (a) the schedule for the waste shipments; (b) the name and location of the facility to which the wastes were shipped; (c) the type and quantity of waste shipped; (d) the method of transportation and name of transporter; and (e) treatment and/or disposal method of the soil.

4.4 Ultimate Disposal Destination

The drum containing the debris was transported to the S&W Waste, Inc. facility in South Kearny, New Jersey before being ultimately disposed at G.R.O.W.S. Landfill. A copy of the shipping manifest is provided in Appendix F.2.1

5.0 ANALYTICAL DATA

No additional data were generated for the removal action activities during the period of January through August 2000.

6.0 EXPENDITURES

Costs incurred by CDE and Dana to implement the work necessary to satisfy the requirements of the AOC have been categorized as follows and are summarized on Table 6-1:

1) Sampling and Analysis.

This category includes field labor and analytical costs for characterization sampling of Properties AA and CC, and verification sampling on the seven Properties. This category also includes costs associated with waste characterization and topsoil characterization analyses.

2) Surveying/Property Inventory.

This category includes work associated with the preparation of the Property surveys for the seven Properties and the landscaping inventories and restoration plans for the seven Properties.

3) Engineering, Planning and Project Management.

This category includes work associated with the preparation of sampling and analysis plan and work plans for submittal to USEPA; coordination of removal action activities with Property owners and residents, USEPA and other interested parties; management of field oversight and removal action contractor activities; and reporting.

4) Engineering Field Oversight.

This category includes daily field engineering oversight of removal action activities and coordination of daily soil disposal activities.

5) Excavation and Backfilling.

This category includes the following items for the removal action contractor:

- Item 1: Mobilization/Demobilization

This item includes all office-based contractor activities performed prior to, during, and following on-site remediation activities, such as preparation of a Health and Safety Plan, and preparation and submittal of contractor-required submittals. This item also includes all activities associated with the contractor's arrival at and departure from the Properties and the preparation for remediation activities, including, but not limited to, installation of temporary sanitary, water, and any other support services or required utilities.

- Item 2: Site Preparation

This item includes all manpower, materials, and equipment necessary to prepare the Properties for remediation activities, including construction of the staging area and decontamination pad, installation of temporary construction fencing, surface clearing, removal of existing fencing to facilitate access to remediation areas, and identification of subsurface utilities. This item also includes temporary storage and subsequent reinstallation of fencing and other structures removed from a Property to facilitate access to remediation areas.

- Item 3: Soil Excavation and Loading

This item includes all manpower, materials, and equipment necessary to excavate the soils on the Properties, to assemble and disassemble a temporary stockpile area, and to load the soil for transport to the disposal facility.

- Item 4: Soil Transportation

This item includes all manpower, materials (where required), and equipment necessary to transport the excavated soils to the G.R.O.W.S. Landfill, and the solid and liquid wastes contained in 55-gallon drums to S&W Waste, Inc.

- Item 5: Backfilling

This item includes all manpower, materials, and equipment necessary to backfill the excavated areas with clean fill, including purchase, transport, placement of clean common fill, and compaction.

- Item 6: Erosion Control

This item includes all manpower, materials, and equipment necessary for placing mulch, protecting trees, and installing silt fence.

6) Disposal.

This category includes the costs associated with the disposal of soil and related wastes at the G.R.O.W.S. Landfill, the transportation and disposal of TSCA-regulated soil at the CWM Model City Landfill, and the disposal of solid and liquid wastes contained in 55-gallon drums by S&W Waste, Inc.

7) Restoration.

This category includes all manpower, materials and equipment necessary to restore each Property in accordance with the restoration plans provided in the Work Plan, as modified based on input from the Property owners. These costs include purchase, transport and placement of topsoil, fertilizer, grass seed, mulch, sod, gravel, stone, weed barriers and vegetation (e.g., trees and shrubs) and the repairs to concrete pavement damaged during excavation activities.

The costs summarized on Table 6-1 represent the current estimates for these categories, as of the date of this Final Report Addendum. All costs are based on actual and estimated invoiced work.

7.0 SUMMARY

In accordance with the requirements specified in the AOC, CDE and Dana have completed the removal of PCB-containing soils at the seven Properties located in South Plainfield, New Jersey. During the period of March through September 1999, sampling, surveying and excavation/restoration plan development were conducted. An assessment of the pre-excavation verification soil sampling results, as well as characterization data for soils not removed from the Properties, determined that the final limits of excavation achieved the AOC-specified cleanup goal. Soil excavation and off-site disposal activities were conducted according to the USEPA-approved Work Plan during the period of September 1999 through February 2000. All excavation areas were then backfilled and graded with soil of acceptable quality, with subsequent restoration activities being completed as of August 22, 2000. The total cost for implementing these activities was approximately \$332,595.

Based on the documentation provided herein and in the Final Report, CDE and Dana have completed all work necessary to satisfy the requirements of the AOC and to meet the AOC-specified cleanup goal on the seven Properties. No further work on the seven Properties is warranted under the AOC.

8.0 REFERENCES

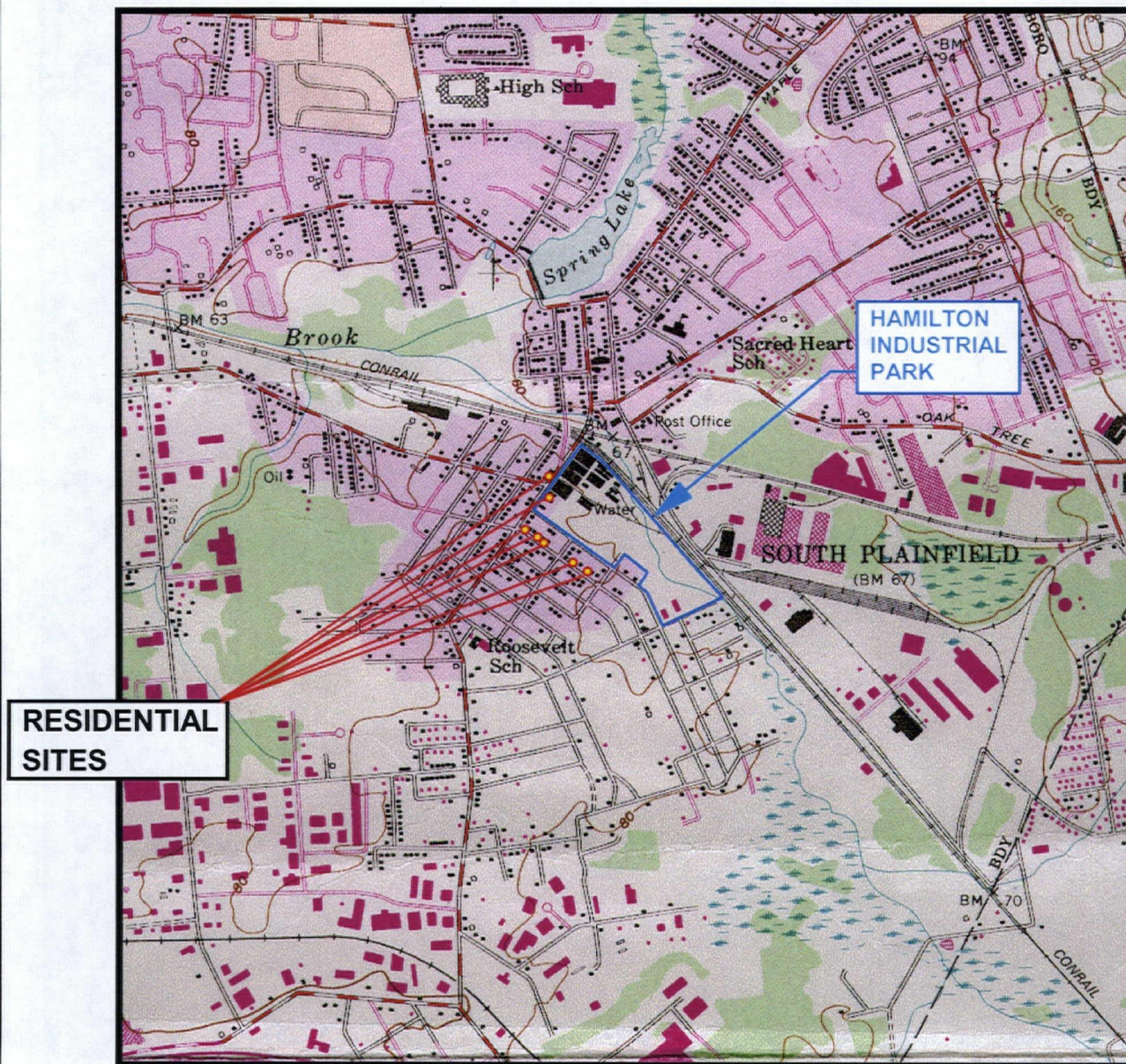
ENVIRON International Corporation (ENVIRON). 1999a. *Sampling and Analysis Plan for Tier II Residential Properties, South Plainfield, New Jersey*. March 17.

ENVIRON International Corporation (ENVIRON). 1999b. *Revised Removal Action Work Plan for Tier II Residential Properties, South Plainfield, New Jersey*. May 21.

ENVIRON International Corporation (ENVIRON). 2000. *Tier II Residential Property Removal Action Final Report, South Plainfield, New Jersey*. January.

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FIGURES



0 2000 4000
 Scale In Feet

SOURCE: USGS TOPOGRAPHIC QUADRANGLE PLAINFIELD, NEW JERSEY; 1955 PHOTOREVISED 1981.

ENVIRON

SITE LOCATION MAP
 TIER II RESIDENTIAL SITES
 SOUTH PLAINFIELD, NJ

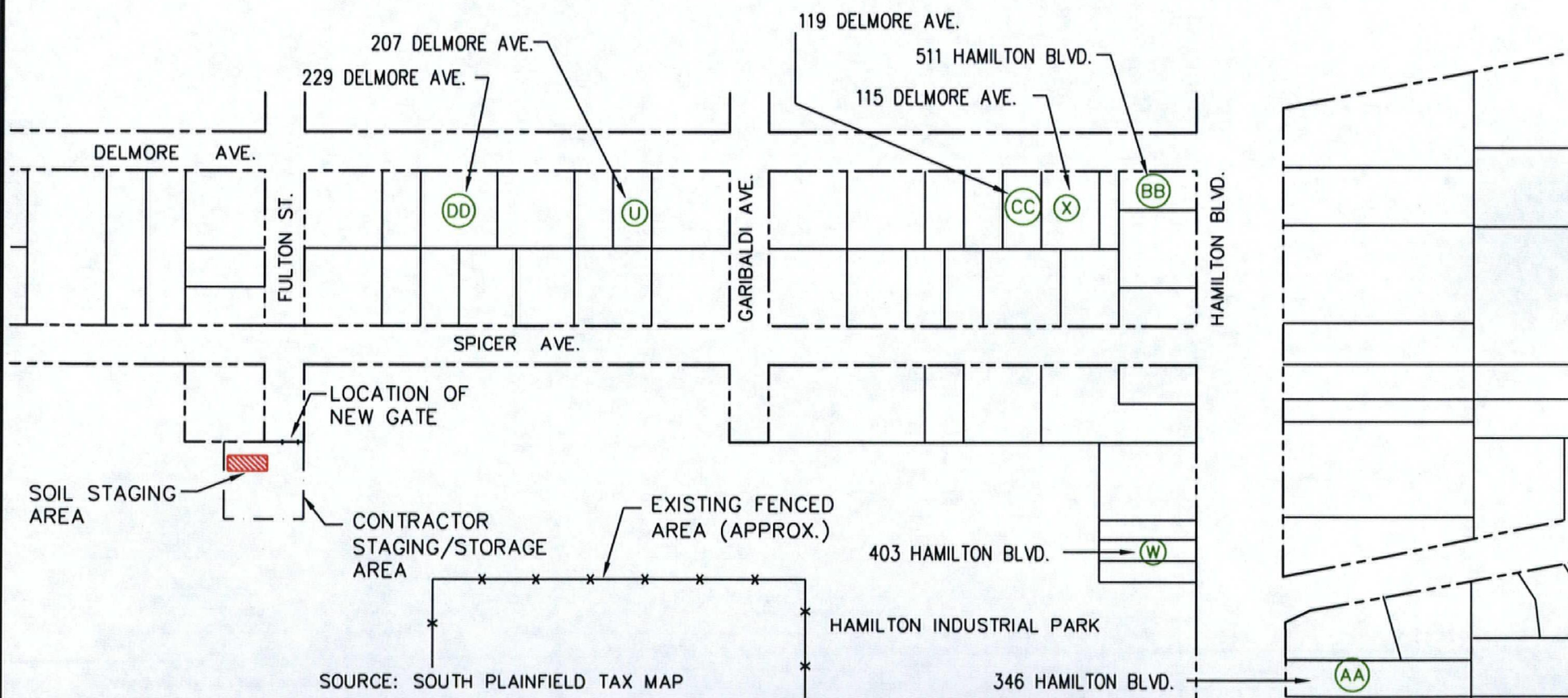
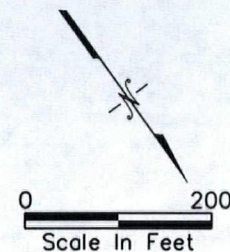
Figure

1-1

Drafted By: HFZ/CCG

Date: 3/23/99

5840CJ02



ENVIRON

DRAFTED BY: HFZ/TJF

DATE: 5/19/99

PROPERTY LOCATION MAP
TIER II RESIDENTIAL SITES
SOUTH PLAINFIELD, NEW JERSEY

FIGURE
1-2

5840AB2B

TABLES

Table 6-1
Removal Action Implementation Cost Summary

Category	Description	Units	Quantity	Unit Price	Total
1	Sampling & Analysis				
1	Additional Characterization Sampling	LS	NA	NA	\$19,666
2	Verification Sampling, Topsoil Analysis & Waste Characterization	LS	NA	NA	\$27,037
	Total Sampling & Analysis Costs:				\$46,703
2	Surveying/Property Inventory	LS	NA	NA	\$17,607
3	Engineering, Planning & Project Management	LS	NA	NA	\$66,165
4	Engineering and Health & Safety Field Oversight	LS	NA	NA	\$39,816
5	Excavation & Backfilling				
1	Mobilization/Demobilization	LS	NA	NA	\$9,100
2	Site Preparation	LS	NA	NA	\$18,960
3	Soil Excavation & Loading	CY	490	\$43.50	\$21,315
4	Transportation	TON	752.68	\$12.00	\$9,032
5	Backfilling - common	CY	186	\$42.00	\$7,844
6	Backfilling - topsoil	CY	302	\$33.00	\$9,966
7	Backfilling - gravel	CY	6	\$34.00	\$204
8	Liquids Handling	GAL	800	\$0.50	\$400
9	Erosion Control	LS	NA	NA	\$500
	Total Excavation & Backfilling Costs:				\$77,321
6	Disposal				
1	GROWS Landfill	TON	752.68	\$36.00	\$27,096
2	CWM Chemical Services Landfill (incl. transportation)	TON	45	\$192.00	\$8,640
3	S&W Waste, Inc.	Drums	12	\$85.00	\$1,020
		Total Disposal Costs:			\$36,756
7	Restoration				
1	Landscaping	LS	NA	NA	\$41,756
2	Fence Replacement	LF	48	\$40.00	\$1,920
3	Drainage Improvements on Property X	LS	NA	NA	\$4,550
	Total Restoration Costs:				\$48,226
Total Removal Action Implementation Cost					\$332,595

Note: The total removal action costs are estimated as of September 26, 2000, based on invoiced costs (estimated and actual)

PLATES

APPENDICES

APPENDIX F

F.2 Waste Manifests

F.2.1 Non-Hazardous Waste Manifests

F.2.1 Non-Hazardous Waste Manifests



State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section

CH 421, Trenton, NJ 08625-0421

EMERGENCY CONTACT: 609-243-9857

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved: OMB No. 2050-0039. Expires 9-30-97

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address HAMILTON INDUSTRIAL PARK C/O ENVIRON CORP 214 CARRNEGIE CENTER PRINCETON NJ 08540		6. US EPA ID Number N J D 9 8 0 7 7 2 7 6 8		A. State Manifest Document Number NJA 2926366		
4. Generator's Phone 609 243-9859		7. Transporter 1 Company Name AUCHTER INDUSTRIAL VAC SERVICE		C. State Trans. ID-NJDEP 559231669		
5. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone 908-862-2277		
9. Designated Facility Name and Site Address S&W WASTE, INC. 105 JACOBUS AVENUE SOUTH KEARNY, NJ 07032		10. US EPA ID Number N J D 9 9 1 2 9 1 1 0 5		E. State Trans. ID-NJDEP		
11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, HM)		12. Containers		13. Total Quantity		
a. NON REGULATED MATERIAL		No. Type		14. Unit Wt/Vol		
b. ID27		1. 300 P		1. ID 2		
c.						
d.						
J. Additional Descriptions for Materials Listed Above <1% POLYCHLORINATED BIPHENYLS 15% POLYETHYLENE; 35% SOIL		S&W APP. 008306 (6/7/01)		Handling Codes for Wastes Listed Above Stabilization T014		
a. 50% GRAVEL, CONCRETE DEBRIS		c.		d.		
b.		d.				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name GINA REYNOLDS		Signature <i>Gina Reynolds</i>		Month Day Year 2 1 7 0 0		
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name SNIFFEN		Signature <i>P. Sniffen</i>		Month Day Year 2 1 7 0 0		
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Month Day Year		
19. Discrepancy Indication Space						
RECEIVED PENDING MANIFEST REVIEW & QUALITY CONTROL						
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name Michael S. ...						
Signature <i>Michael S. ...</i>		Month Day Year 2 1 7 0 0				